



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

observed, bringing the number of such families to twenty-two. Incidentally, she shows that LIGNIER was probably mistaken in attributing only phloem-forming activity to the cambium in the petiolar bundle of *Arum maculatum*, since she finds secondary xylem in the corresponding bundles of a closely related species (*A. italicum*), and LIGNIER's figures indicate that the same process takes place in *A. maculatum*.—J. M. C.

Heat of inversion.—A careful measurement of the heat of inversion of sucrose by invertase has been made by DIXON and BALL,²¹ who used a thermocouple differential calorimeter in vacuum flasks for the determination. Their results confirm the value found by BROWN and PICKERING many years ago, the mean of all results being 3.83 calories for each gram molecule of sugar inverted. The method is more accurate than the heat of combustion determinations of this value.—C. A. SHULL.

Fungus in Pellia.—RIDLER²² has described the life history of a fungus occurring in a definite zone in the thallus of *Pellia epiphylla*. It was found to occur in the cells of the sporophyte, from which it was isolated, and identified as a species of *Phoma*. The fungus kills the protoplasts of the infected cells of the gametophyte, which ultimately become brown. The effect on the sporophyte is twofold: the contents of the cells are killed, and the cell walls are also wholly or partially absorbed.—J. M. C.

Mycorrhiza of conifers.—MCDUGALL²³ has identified two mycorrhizal fungi from the roots of *Picea rubra* as belonging to the genus *Cortinari*, and described a tubercle-like mycorrhiza of *Pinus Strobus*. He reiterates his opinion that these ectotrophic mycorrhizal fungi are of no benefit to the trees concerned, and probably do them no great harm, although truly parasitic in their relationship.—G. D. FULLER.

Rocky Mountain flora.—RYDBERG²⁴ has continued his studies of the montane regions of the southern Rockies, already noted in this journal,²⁵ by investigating the aquatic and grassland associations, as well as the flora of the sand hills, dry ridges, and rock slides. The plants of these habitats are listed as eastern, western, and endemic.—GEO. D. FULLER.

²¹ DIXON, H. H., and BALL, NIGEL G., A determination by means of a differential calorimeter of the heat produced during the inversion of sucrose. Notes Bot. School, Trinity Coll., Dublin 3:121-132. 1922.

²² RIDLER, W. F. F., The fungus present in *Pellia epiphylla* (L.) Corda. Ann. Botany 36:193-207. figs. 8. 1922.

²³ MCDUGALL, W. B., Mycorrhizas of coniferous trees. Jour. Forestry 20:255-260. figs. 3. 1922.

²⁴ RYDBERG, P. A., Phytogeographical notes on the Rocky Mountain region. X. Grasslands and other open formations of the montane zone of the southern Rockies. Bull. Torr. Bot. Club 48:315-327. 1921.

²⁵ BOT. GAZ. 71:336. 1921.